

## Remarks

### I. Double Patenting

The Office Action rejects claim 15 under the judicially created doctrine of double patenting over claim 1 of U.S. Patent No. 6,247,060.

Applicants respectfully disagree with the Office Action statement that “the sole difference in both cases characterized by the the terms ‘protocol processing stack’ (as cited in the U.S. Patent No. 6247060) and ‘a central processing unit running protocol processing instructions’ (as cited in the instant application) are in fact functionally identical.”

In an effort to expedite prosecution, however, applicants have canceled claim 15 without prejudice.

### II. 35 U.S.C. § 112

Claim 15 stands rejected under 35 U.S.C. § 112 as providing insufficient antecedent basis for the term “said CCB.”

Applicants thank the Examiner for the careful review of the claims. As noted above, claim 15 has been canceled.

### III. 35 U.S.C. § 102 and 35 U.S.C. § 103

Paragraph 4 of the Office Action quotes 35 U.S.C. § 103(a), yet paragraph 5 of the Office Action states that claims 1-8 and 10-29 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,321,819 to Szczepanek. For completeness, therefore, applicants will respond to the Office Action regarding both 35 U.S.C. § 102 and 35 U.S.C. § 103.

Paragraph 6 of the Office Action states:

As to claims 1 and 16, Szczepanek; teaches the invention as claimed including: a system for communication between a local host [10, Fig. 1] and a remote host that are connectable by a network [14, Fig. 1], the system comprising:

a communication processing device (CPD) [224, Fig. 6] that is integrated into the local host [226, 228, Fig. 6] to connect the network and the local host, said CPD including hardware logic configured to process

network packets[col.7 lines 29-59], , wherein said CPD and said CPU are configured such that a message transferred between the network and the local host is generally processed by said CPD instead of said CPU when said CPD controls said connection [note that since Szczepanek;'s CPD (i.e., the network adapter) is placed in between the local host and the network, a message transferred between the network and the local host must be processed at the CPD (see, e.g., col. 7, lines 29-31) and the network connection is always under the control of the CPD].

Szczepanek; does not specifically teach that a central processing unit (CPU) running protocol processing instructions in the local host to create a transport layer connection between the local host and the remote host.

However, it is well known that when a networked client (i.e., via Szczepanek;'s local host) is connected to the Internet and makes a request to a remote host, a TCP session is normally created between the local host and the remote host.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the TCP transport layer connection, which is needed for HTTP communication over the Internet, would be initiated and/or processed at the local host, because Szczepanek;'s local host is able to connect to the Internet through the Ethernet interface.

“Anticipation under § 102 requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in that claim.” *Sandt Tech., Ltd. v. Resco Metal & Plastics Corp.*, 264 F.3d 1344, 1350 (Fed.Cir. 2001) (citations and internal quotations omitted). “To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991).” *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1367 (Fed. Cir. 2004).

“Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious ‘modification’ of the prior art. The mere fact that the prior art may be

modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992). See also *In re Lee*, 277 F.3d 1338, 1342-1343 (Fed. Cir. 2002); *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, (Fed. Cir. 2001).

As noted in the Office Action, Szczepanek does not teach that a central processing unit (CPU) running protocol processing instructions in the local host to create a transport layer connection between the local host and the remote host. Because such a central processing unit (CPU) running protocol processing instructions in the local host to create a transport layer connection between the local host and the remote host is also not inherently present in Szczepanek, that reference does not anticipate claims 1 or 16.

Moreover, applicants respectfully disagree with the Office Action statement that “It would have been obvious to one of ordinary skill in the art at the time the invention was made that the TCP transport layer connection, which is needed for HTTP communication over the Internet, would be initiated and/or processed at the local host, because Szczepanek’s local host is able to connect to the Internet through the Ethernet interface.”

Initially note that Szczepanek does not teach or suggest a TCP or other transport layer protocol, the Internet or the HTTP protocol, or any sort of a logical connection. Szczepanek also does not teach or suggest, as noted by the Office Action, a central processing unit (CPU) running protocol processing instructions in the local host to create a transport layer connection between the local host and the remote host. In addition, no incentive to modify the invention of Szczepanek is presented in the Office Action. Obviousness is not found in the absence of “any specific hint or suggestion in a particular reference.” *In re Lee*, 277 F.3d at 1344. Essentially, the Office Action merely uses hindsight and the present invention as a template for modifying Szczepanek to allege that claims 1 and 16 are obvious. Stated differently, applicants respectfully assert that a prima facie case of obviousness has not been presented for claim 1 or claim 16. In addition, because no incentive has been presented for modification of the cited art has been presented for any of the other claims, all of the claims at issue are nonobvious.

Because Szczepanek does not teach or suggest a TCP or other transport layer protocol, the Internet or the HTTP protocol, or any sort of a logical connection, applicants respectfully inquire what the basis is for the Office Action assertion that: “It would have been obvious to one of ordinary skill in the art at the time the invention was made that the TCP transport layer connection, which is needed for HTTP communication over the Internet, would be initiated and/or processed at the local host, because Szczepanek;’s local host is able to connect to the Internet through the Ethernet interface.” If this assertion stems from the Examiner’s personal knowledge, applicants respectfully request that the Examiner provide a supporting affidavit as required by 37 C.F.R. §1.104(d)(2). If this assertion is instead based on judicial notice, applicants respectfully request that the Examiner provide a supporting reference document.

Regarding claims 2 and 3, the Office Action states that “Szczepanek; further teaches that said hardware logic is configured to process Transmission Control Protocol (TCP) [col.44, lines 16-23; i.e., Szczepanek;’s adapter is able to process protocol layers other than the physical layer].”

Applicants respectfully assert that Szczepanek does not teach or suggest hardware logic that is configured to process Transmission Control Protocol (TCP). “Protocol layers other than the physical layer” could for instance include a data link and/or media access control layer as well as a network layer, instead of a transport layer. *Assuming arguendo* that a transport layer was taught by Szczepanek, simpler protocols such as UDP or ITU would be expected to be performed by hardware long before TCP, and there is no indication in Szczepanek of even such simpler transport layer protocols being processed by hardware. Therefore, applicants respectfully assert that neither a prima facie case of anticipation nor a prima facie case of obviousness has been presented for either claim 2 or claim 3.

Regarding claim 4, the Office Action states that “Szczepanek; further teaches that said CPD is connected to said CPU by a bus.” As noted above, however, the Office Action admits that Szczepanek does not teach a central processing unit (CPU) and so it is unclear that Szczepanek further teaches that said CPD is connected to said CPU by a bus.

Regarding claim 5, the Office Action states that “Szczepanek; further teaches that said CPD includes a communication processor [see 230 of Fig. 6]. However, it is obvious

that the a communication processor can be replaced by a microprocessor because the later is functionally capable and widely available.” Applicants respectfully disagree with the assertion that “it is obvious that the a communication processor can be replaced by a microprocessor because the later is functionally capable and widely available.” If this assertion stems from the Examiner’s personal knowledge, applicants respectfully request that the Examiner provide a supporting affidavit as required by 37 C.F.R. §1.104(d)(2). If this assertion is instead based on judicial notice, applicants respectfully request that the Examiner provide a supporting reference document.

Regarding claim 6, the Office Action states that “Szczepanek; further teaches that said CPD is connected to an input/output (I/O) controller [col.8, lines 7-16].” Those lines make clear, however, that the I/O controller is a part of the system interface. Paragraph 6 of the Office Action labels element 224 of Szczepanek as the CPD, and the system interface is contained within, rather than connected to, element 224.

Regarding claim 7, the Office Action admits that “Szczepanek; does not specifically teach that said I/O controller is a peripheral component interconnect (PCI) bridge.” The Office Action, however, takes Official Notice that having a host bus interfaced to a PCI bridge is well known in the art. Applicants respectfully request that the Examiner provide a supporting reference document for this assertion of Official Notice.

The Office Action then states: “It would have been obvious to one of ordinary skill in the art at the time the invention was made that Szczepanek;’s CPD may also be connected to a PCI bridge through the commonly interfaced host bus because a PCI bridge makes the system expandable to conventional PCI cards.”

If this assertion stems from the Examiner’s personal knowledge, applicants respectfully request that the Examiner provide a supporting affidavit as required by 37 C.F.R. §1.104(d)(2). If this assertion is instead based on judicial notice, applicants respectfully request that the Examiner provide a supporting reference document. Applicants further note that no motivation has been provided for this assertion, either by the Office Action or Szczepanek. See *In re Lee*, 277 F.3d at 1344.

Regarding claim 8, the Office Action states that “Szczepanek; further teaches that the system further comprises a memory that is disposed in said host and accessible by

said CPU and said CPD [col.8, lines 37-40].” The cited lines, however, seem to involve two memories rather than “a memory that is disposed in said host and accessible by said CPU and said CPD,” as recited in claim 8.

Regarding claim 10, the Office Action admits that “Szczepanek; does not specifically teach that said CPD is integrated with a peripheral component interconnect (PCI) bridge.” The Office Action, however, takes Official Notice that having a network adapter integrated with a PCI bridge is well known in the art. Applicants respectfully request that the Examiner provide a supporting reference document for this assertion of Official Notice.

The Office Action then states: “It would have been obvious to one of ordinary skill in the art at the time the invention was made to integrate Szczepanek;’s CPD with a PCI bridge because such a hardware arrangement would facilitate the access of data/information residing in the associated PCI cards.”

If this assertion stems from the Examiner’s personal knowledge, applicants respectfully request that the Examiner provide a supporting affidavit as required by 37 C.F.R. §1.104(d)(2). If this assertion is instead based on judicial notice, applicants respectfully request that the Examiner provide a supporting reference document. Applicants further note that no motivation has been provided for this assertion, either by the Office Action or Szczepanek. See *In re Lee*, 277 F.3d at 1344.

Regarding claims 11-13, the Office Action states that “Szczepanek; further teaches that said CPD is integrated with a memory controller for said CPU, wherein said CPD is integrated with (and therefore connected with) an I/O controller and a memory controller for said CPU [col.8, lines 1-62].”

Regarding claim 11, applicants respectfully assert that Szczepanek does not teach that “said CPD is integrated with a memory controller for said CPU.”

Regarding claim 12, applicants respectfully assert that Szczepanek does not teach that “said CPD is integrated with an I/O controller and a memory controller for said CPU.”

Regarding claim 13, applicants respectfully assert that Szczepanek does not teach that “said CPD is connected with an I/O controller that connects said CPD to a memory controller for said CPU.”

Regarding claim 15, the Office Action admits that “Szczepanek; does not specifically teach that said CPD is connected to a hub interface bus that connects a memory controller to an I/O controller.” The Office Action asserts, however that “It is well known in the art that a plurality of local network nodes may form as a local area network (LAN) by connecting them with a hub. Since Szczepanek;’s CPD is connected to an Ethernet, a form of local area network, it is obvious to one of ordinary skill in the art that Szczepanek;’s CPD may be connected to a hub interface when Szczepanek;’s Ethernet incorporates at least one hub to form an extended LAN.

If this assertion stems from the Examiner’s personal knowledge, applicants respectfully request that the Examiner provide a supporting affidavit as required by 37 C.F.R. §1.104(d)(2). If this assertion is instead based on judicial notice, applicants respectfully request that the Examiner provide a supporting reference document. Applicants further note that no motivation has been provided for this assertion, either by the Office Action or Szczepanek. See *In re Lee*, 277 F.3d at 1344.

Regarding claim 15, the Office Action states that “Szczepanek; further teaches that an ownership bit that designates whether said CPU or said CPD controls the memory [col.8, lines 29-36].” Applicants respectfully disagree that the cited lines teach what the Office Action says they teach, but have canceled claim 15 without prejudice to expedite prosecution.

Regarding claims 17-29, the Office Action states that “Since the features of these claims can also be found in claims 1, 4-6, 8 and 10-15, they are rejected for the same reasons set forth in the rejection of claims 1, 4-6, 8 and 10-15.” Applicants respectfully disagree with this rejection for at least the reasons stated above for claims 1, 4-6, 8 and 10-15.

In addition, with regard to all of the rejected claims, even if Szczepanek were to be modified as proposed in the Office Action, substantial, nonobvious differences remain between the claims at issue and Szczepanek as proposedly modified.

#### IV. Allowed Claims

Applicants appreciate the indication that claims 30-42 are allowable but disagree that any of those claims recite determining whether a communication processing device

should bypass the protocol handling on a packet-by-packet basis based on a control indication obtained from its associated local host.

IV. Petition to Extend Time

A Petition to Extend the Time for Response by two months, from March 23, 2005 to May 23, 2005, is enclosed, along a check in the amount of \$450.00 to pay the requisite fee.

V. Conclusion

Applicant has responded to each of the items of the Office Action, showing that the Office Action has not presented a prima facie case of anticipation or obviousness for any of the claims. As such, applicant respectfully asserts that the application is in condition for allowance, and a notice of allowance is solicited.

Respectfully submitted,

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450, on May 23, 2005.

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